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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,540	09/24/2004	Kai-Kuang Ho	13365-US-PA	5539

31561 7590 07/10/2008

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE  
7 FLOOR-1, NO. 100  
ROOSEVELT ROAD, SECTION 2  
TAIPEI, 100  
TAIWAN

EXAMINER
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NGUYEN, TRAM HOANG

ART UNIT	PAPER NUMBER
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2818

NOTIFICATION DATE	DELIVERY MODE
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07/10/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USA@JCIPGROUP.COM.TW  
Belinda@JCIPGROUP.COM.TW

<b>Office Action Summary</b>	<b>Application No.</b> 10/711,540	<b>Applicant(s)</b> HO ET AL.	
	<b>Examiner</b> TRAM H. NGUYEN	<b>Art Unit</b> 2818	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 March 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 25 and 28-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25, 28-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments with respect to the newly amended claim 25 and claims 28-34 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claims 25, 28, 29, 30, 33 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Huang (US 6,545,332).***

Regarding **claim 25**, Fig. 6 of Huang discloses a chip with polymer thereon, comprising at least:

a chip (130) having an active surface (refer to the upper surface of 103);

a polymer (402), disposed at periphery of the active surface of the chip (refer to the upper surface of 103) extending to sidewalls of the chip (130), wherein a central portion of the active surface (refer to the upper surface of 130 is not cover by 402) is exposed; and

a plurality of wires (140) electrically connecting the chip (130) and a carrier (100) for carrying the chip (130), wherein an end of each of the wires (140) connected with a the active surface of the chip (refer to the upper surface of 130) is covered by the

polymer (402) and the other end of each of the wires connected with the carrier is exposed outside of the polymer (402).

Regarding **claim 28**, Huang discloses all the limitations of the claimed invention for the same reasons as set-forth above. Besides, fig. 6 of Huang discloses the polymer (402) further covers a portion of the carrier (100).

Regarding **claim 29**, Huang discloses all the limitations of the claimed invention for the same reasons as set-forth above. Besides, fig. 6 of Huang discloses the carrier (100) comprises a leadframe or a circuit substrate.

Regarding **claim 30**, Huang discloses all the limitations of the claimed invention for the same reasons as set-forth above. Besides, fig. 6 of Huang discloses polymer (402) is covering whole periphery of the active surface of the chip (refer to the upper surface of 130). Thereof, it would be an inherent to have the polymer is shaped as ring covering whole periphery of active surface of the chip as viewed from top.

Regarding **claim 33**, Huang discloses all the limitations of the claimed invention for the same reasons as set-forth above. Besides, fig. 6 of Huang shows the polymer (402) comprises a stress buffer polymer (see col. 4, lines 55-57).

Regarding **claim 34**, Huang discloses all the limitations of the claimed invention for the same reasons as set-forth above. Besides, fig. 6 of Huang shows the stress buffer polymer (402) comprises epoxy resin or polyimide (see col. 4, lines 55-57).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

***Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Jiang et al. (US 7,037,756; hereinafter Jiang)***

Regarding **claim 31**, Huang discloses all the limitations of the claimed invention for the same reasons as set-forth above except for the polymer is shaped as strips covering two opposite edges of the active surface of the chip.

Jiang teaches a stacked microelectronic devices packaging (fig. 3C) wherein wire coating segment (60) is applied as two discrete wire coating segments covering two parallel rows extending adjacent opposite edges of the electronic component (30))(see Jiang: col. 6, lines 41-50).

Therefore, it would have been obvious to one having ordinary skills in the art at the time the invention was made to specify the shape of the polymer layer of Wakasima as strips covering two opposite edges of the active surface of the chip as taught by Jiang in order to stack multiple chips without need of any other adhesive

Regarding **claim 32**, Huang discloses all the limitations of the claimed invention for the same reasons as set-forth above except for the polymer is shaped as a plurality of pieces covering four comers of the active surface of the chip.

Jiang teaches a stacked microelectronic devices packaging (fig. 3C) wherein wire coating segment (60) is a plurality of coating segments covering four corners of two parallel rows that extending adjacent opposite edges of the electronic component (30).

Therefore, it would have been obvious to one having ordinary skills in the art at the time the invention was made to specify the shape of the polymer layer of Wakasima as plurality of pieces covering four corners of the active surface of the chip as taught by Jiang in order to stack multiple chips without need of any other adhesive

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tram Hoang Nguyen whose telephone number is (571)272-5526. The examiner can normally be reached on Monday-Friday, 8:30 AM – 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Loke can be reached on (571)272-1657. The fax numbers for all communication(s) is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1625.

/Tram H Nguyen/  
Examiner, Art Unit 2818

/Dao H Nguyen/  
Primary Examiner, Art Unit 2818  
July 3, 2008